



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/207,130	12/08/1998	DANIEL VIERA CONRAD	RA9-98-053	6377
47052	7590	07/01/2005		
SAWYER LAW GROUP LLP PO BOX 51418 PALO ALTO, CA 94303			EXAMINER ROBINSON BOYCE, AKIBA K	
			ART UNIT	PAPER NUMBER
			3639	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**UNITED STATES DEPARTMENT OF COMMERCE****U.S. Patent and Trademark Office**

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR /	ATTORNEY DOCKET NO.
---------------------------------	-------------	------------------------	---------------------

09/207,130

EXAMINER

ART UNIT

PAPER

060905

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

The following is a supplemental examiner's answer to replace the examiner's answer filed 8/16/04. The supplemental examiner's answer now includes the "References of Record" section.

MC

A



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/207,130  
Filing Date: December 08, 1998  
Appellant(s): CONRAD ET AL.

Joseph A. Sawyer, Jr.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/1/04.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because the appellant states that there are four separate groups, however, appellant does not technically argue each group. Appellant only makes arguments for claim 1. For these reasons, the examiner will constructively group all pending claims to stand or fall together in the same group.

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

5,088,033	BINKLEY et al	3-1990
5,812,668	WEBER	6-1996

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Binkley, et al (US Patent 5,088,033), in view of Weber (US Patent 5,812, 668).

As per claims 1, 2, 7, 8, 9, 14, 15, Binkley, et al discloses:  
providing an emulation module interfacing directly with the operating system and corresponding to the device/providing an emulation object interfacing directly with the operating system and corresponding to the device /an emulation module interfacing directly with the operating system and corresponding to the device/an emulation object interfacing directly with the operating system and corresponding to the device (Col. 3, lines 34-37, Col. 8, lines 62-68).

ensuring that the application will utilize the emulation module when the application is executed on the development system/ensuring that the application will utilize the emulation object.../means for ensuring.../wherein the application is capable of utilizing the emulation module in lieu of the device.../emulating the interaction...(Col. 6, line 66-Col. 7, line 4);

executing the application on the development system independently of the point of sale system, wherein the emulation module and the application emulate the interaction between the application and the device that occurs when the application is executed on the point of sale equipment/wherein the application is executed on the system, the emulation module and the application independently.../wherein the application is executed on the development system, the emulation module and the application emulate the interaction...(Col. 1, lines 60-62, Col. 1, line 66-Col. 2, line 1, Col. 2, lines 9-19, Col. 7, lines 32-38, [where the examiner is interpreting the "development system" and the "point of sale system" of the present invention to be analogous to the "host system" and "target system" of Binkley, et al];

wherein the emulation module and the application both interface directly with the operating system of the development system, (Col. 59, lines 31-38 and lines 54-61, [where the emulation module resides with the emulation processor and where the host system or development system's environment comprises device emulating means for directly interfacing with the target system I/O operation (application), See Col. 59, lines 54-61. It is also shown that the host/development system's environment comprises means for determining a current emulated state of the communication means, meaning the host/development system has direct contact with emulation means/modules (See Col. 59, lines 50-53)]).

ensuring that the application adequately utilizes the emulation object...(Col. 2, lines 9-13);

modifying the application...(Col. 1, lines 11-14, Col. 2, lines 13-19).

allowing a developer to provide input...(Col. 50, lines 41-43);

providing the input to the application in a form expected...(Col. 51, lines 3-17).

Binkley, et al fails to teach the following, however, Weber discloses:

A point of sale environment/A point of sale system.../wherein the device is specialized for the point of sale equipment, (Col. 65, lines 54-63,w/ abstract, lines 1-11)

It would have been obvious to one of ordinary skill in the art for the device to be specialized for the point of sale equipment because the transactions that are being tested on a different computer in Weber (test gateway computer) are occurring in a pos environment. In this case, since transactions are occurring at a pos system, any device used at the pos must therefore be specialized or formatted to operate at the pos system.

As per claims 3, 10, Binkley, et al discloses:

wherein the application is platform independent...(Col. 58, line 46-Col. 59, line 10).

As per claim 5, 12, Binkley, et al discloses:

wherein the point of sale equipment includes a driver...(Col. 19, line 67-Col. 20, line 6).

As per claim 6, 13, Binkley, et al discloses:

wherein the emulation object emulates the driver and the device...(Col. 19, lines 11-15, Col. 19, line 67-Col. 20, line 6).

As per claims 4, 11, Binkley, et al fails to teach the following, however Weber discloses:

wherein the application is a JAVA application...(Col. 7, lines 15-17).

It would have been obvious to one of ordinary skill in the art to make the application and the emulation object platform independent because in a computer environment, applications are constantly being changed around and depending on these changes and the needs of the user, the platforms will also need to change in order to fit the environment. It would have been obvious to one of ordinary skill in the art to make the application and the emulation object JAVA applications because JAVA is a common, distributed programming language that is simple and is used for object-oriented programming in the application development art.

**(11) Response to Argument**

First, appellant argues that Binkley in view of Weber neither teaches nor suggests directly interfacing the application being developed for a POS system and the emulation module emulating a specialized device for the POS system directly with the operating system of the development system. However, the combination of Binkley and Weber discloses this feature. Specifically, in Binkley, Col. 59, lines 31-38 and lines 54-61, it is disclosed that the emulation module resides with the emulation processor and that the host system or development system's environment comprises device-emulating means for *directly interfacing* with the target system I/O operation or the application. In addition, Col. 59, lines 50-53 of Binkley discloses that the host/development system's environment comprises means for determining a current emulated state of the communication means, meaning the host/development system has direct contact with emulation means/modules.

Appellant also argues that any software module used to emulate devices in Binkley will interface with different operating systems, and that the system of Binkley



uses separate host and emulation processors. However, the limitations of claim 1 do not disclose using the same host and emulation processor, but merely discloses that the emulation module and the application both interface directly with the operating system of the development system (for one application) therefore, if there were more than one application, the emulation module for that particular application and that application would interface directly with the operating system of the development system for that particular application, which, is different for the operating system for the first application. In addition, as disclosed by appellant on page 8, lines 5-6 of the brief, the emulation processor *would naturally run* the operating system and other applications for the target system, therefore, it would also be natural and common in an emulation environment for the application being developed to also interface with the operating system of the emulation processor, in addition to the operating system of the development system in order for emulation of that application to occur.

Appellant also argues that Weber fails to remedy the defects of Binkley and that Weber does describe POS technology, and according to appellant, Weber relates to the final POS system used by an end user, rather than a mechanism for testing applications being developed for use with a POS system. However, Weber describes a system where a merchant-controlled computer communicates with a *test gateway* by transmitting messages over a communications channel that are related to transactions to the test gateway computer (as shown in abstract). In addition, in Col. 65, lines 54-63, Weber describes a POS application where a data structure representing a POS transaction request is initiated. Therefore, Weber describes the testing of a POS application. Since the test gateway of Weber responds with *simulated* transaction responses that include configuration data that is used by the merchant-operated computer to configure itself to access a production gateway computer, as described in

Art Unit: 3639

the abstract of Weber, the testing of the POS application is processed for an application being developed. In "The Authoritative Dictionary of IEEE Standards Terms", emulate is defined as follows: "A model that accepts the same inputs and produces the same outputs as a given system represented... See also: simulate". The term simulate is defined as follows: "To represent the functioning of one system by another...".

Therefore, according to "The Authoritative Dictionary of IEEE Standards Terms", simulating is a form of emulating, but more specific to computer systems. Therefore, these simulated responses of Weber correspond to the emulated responses of the present invention.

Since all claims now stand and fall together, claims 2-15 are rejected for the same reasons as discussed above with respect to claim 1.

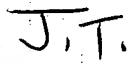
For the above reasons, it is believed that the rejections should be sustained.

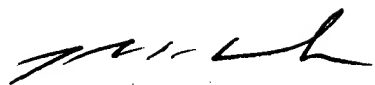
Respectfully submitted,

A. R. B.  
June 9, 2005

Conferees  
Akiba Robinson-Boyce

  
Susanna Diaz 

  
Joseph Thomas

  
JOHN G. WEISS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

IBM CORPORATION  
PO BOX 12195  
DEPT 9CCA, BLDG 002  
RESEARCH TRIANGLE PARK, NC 27709